

**I. Preliminary Matters**

On May 12, 2004, Applicant responded to an Election of Species Requirement by electing Species II (Fig. 4), and claims 12-16 and 18. However, the current Office Action provides rejections for all claims 1-9 and 12-18 (i.e. claims 10 and 11 were previously withdrawn). In view of the discrepancy, the undersigned contacted the Examiner on September 8, 2004. The Application was transferred to a new Examiner, and the new Examiner indicated that he did not notice the May 12, 2004 Response to Election of Species. During the telephone conversation, the undersigned noted MPEP §803, which indicates that a restriction is proper if there is a serious burden on the Examiner to search and examine the entire application. Since the Examiner has already searched the prior art, and issued rejections on all pending claims, the undersigned indicated that there is no longer a burden on the Examiner, and therefore, the non-elected claims 1-8 and 17 should be treated as rejoined. The Examiner requested that Applicant note the conversation in the formal amendment. Accordingly, Applicant has responded to all rejections provided in the current Office Action, and respectfully requests that the Examiner treat claims 1-8 and 17 as rejoined.

**II. Rejections under 35 U.S.C. § 102(e) in view of IEEE Photonics Technology Letter Vol. 12, No. 1, January 2000 to Horie et al. ("Horie") (cited on pg. 1 of the present Application)**

The Examiner has rejected claims 1-4 as being anticipated by Horie.

**A. Claim 1**

Applicant submits that claim 1 is patentable over the cited reference. For example, claim 1 recites two exposed portions having a depth at which the semiconductor layer is exposed continuously from one of two resonator end faces to the other. Further, claim 1 recites a ridge portion formed between the two exposed portions, which has a current injection window.

The Examiner maintains that Fig. 1 of Horie discloses the above features. Fig. 1 shows a current injection window. However, the figure and disclosure fail to teach or suggest the two exposed portions recited in the claim (i.e., there are no exposed portions formed on either side of the current injection window).

In addition, claim 1 further recites that in at least one of the resonator end faces of the ridge portion, a portion of the contact layer near the one resonator end face is removed.

Applicant submits that Horie fails to teach or suggest the above feature. As discussed on pg. 1, lines 23-26 of the present Application, the structure disclosed by Horie has a problem that the current non-injection at the device end face is incomplete because spreading of current through the contact layer occurs near the end face.

Accordingly, Applicant submits that claim 1 is patentable over the cited reference for at least the reasons presented above.

**B. Claims 2-4**

Since claims 2-4 are dependent upon claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency.

**III. Rejections under 35 U.S.C. § 103(a) in view of Horie and U.S. Patent No. 6,396,863 to Fukunaga et al. (“Fukunaga ‘863”)**

The Examiner has rejected claims 5-9 as being unpatentable over Horie in view of Fukunaga. However, Fukunaga ‘863 and the present application are both assigned to Fuji Photo Film Co., Ltd. Accordingly, Applicant asserts that the subject matter of Fukunaga ‘863 and the claimed invention were subject to a common obligation of assignment pursuant to MPEP 706.02(l)(2) and 35 U.S.C. § 103(c).

This demonstration of common obligation of assignment removes Fukunaga ‘863 as a reference, which in turn, overcomes the 35 U.S.C. §103 rejections of claims 5-9. Applicant submits the enclosed assignment documents for Fukunaga ‘863 (Reel 011060, Frame 0358, Date recorded 8/7/2000) and the current Application (Reel 013016, Frame 0422, Date recorded 6/21/2002) to the Examiner.

**IV. Rejections under 35 U.S.C. § 103(a) in view of Fukunaga '863 and U.S. Patent No. 6,127,691 to Fukunaga et al. ("Fukunaga '691")**

The Examiner has rejected claims 12, 14-16 and 18 under 35 U.S.C. § 103(a) in view of Fukunaga '863 and Fukunaga '691. However, as stated above, Applicant hereby removes Fukunaga '863 by asserting common obligation of assignment. The removal of Fukunaga '863 overcomes the rejections of claims 12, 14-16 and 18.

**V. Rejection under 35 U.S.C. § 103(a) in view of Fukunaga '863 and Horie**

The Examiner has rejected claim 13 under 35 U.S.C. § 103(a) in view of Fukunaga '863 and Horie. However, as stated above, Applicant hereby removes Fukunaga '863 by asserting common obligation of assignment. The removal of Fukunaga '863 overcomes the rejection of claim 13.

**VI. Rejection under 35 U.S.C. § 103(a) in view of Horie and U.S. Patent No. 6,516,016 to Fukunaga et al. ("Fukunaga '016")**

The Examiner has rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Horie in view of Fukunaga '016. However, Fukunaga '016 and the present application are both assigned to Fuji Photo Film Co., Ltd. Accordingly, Applicant asserts that the subject matter of Fukunaga '016 and the claimed invention were subject to a common obligation of assignment pursuant to MPEP 706.02(l)(2) and 35 U.S.C. § 103(c).

This demonstration of common obligation of assignment removes Fukunaga '016 as a reference, which in turn, overcomes the 35 U.S.C. §103 rejections of claim 17. Applicant submits the enclosed assignment documents for Fukunaga '016 (Reel 011294, Frame 0448, Date recorded 11/20/2000) and the current Application (Reel 013016, Frame 0422, Date recorded 6/21/2002) to the Examiner.

## VII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

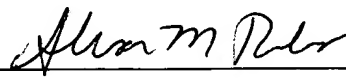
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**23373**

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Date: November 12, 2004



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## Assignments on the Web &gt; Patent Query

## Patent Assignment Abstract of Title

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## Total Assignments: 1

Patent #: 6396863

Issue Dt: 05/28/2002

Application #: 09634704

Filing Dt: 08/07/2000

Inventor: Toshiaki Fukunaga

Title: HIGH-POWER SEMICONDUCTOR LASER DEVICE HAVING INDEX-GUIDED STRUCTURE WITH INALGAP CURRENT CONFINEMENT LAYER

## Assignment: 1

Reel/Frame: 011060/0358

Recorded: 08/07/2000

Pages: 2

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

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Exec Dt: 07/13/2000

Assignee: FUJI PHOTO FILM CO., LTD.

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## Patent Assignment Details

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Reel/Frame: [013016/0422](#)

Recorded: 06/21/2002

Pages: 3

Conveyance: CORRECTED RECORDATION FORM COVER SHEET TO CORRECT ASSIGNEE'S ADDRESS, PREVIOUSLY  
RECORDED AT REEL/FRAAME 012479/0872 (ASSIGNMENT OF ASSIGNOR'S INTEREST)

## Total properties: 1

1 Patent #: NONE Issue Dt: Application #: 09973814 Filing Dt: 10/11/2001  
Publication #: [US20020061044](#) Pub Dt: 05/23/2002

Title: Semiconductor laser device with a current non-injection region near a resonator end face, and  
fabrication method thereof

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## Total Assignments: 1

Patent #: 6516016

Issue Dt: 02/04/2003

Application #: 09715192

Filing Dt: 11/20/2000

Inventors: Toshiaki Fukunaga, Mitsugu Wada

Title: HIGH-POWER SEMICONDUCTOR LASER DEVICE HAVING CURRENT CONFINEMENT STRUCTURE AND INDEX-GUIDED STRUCTURE, AND OSCILLATING IN TRANSVERSE MODE

## Assignment: 1

Reel/Frame: 011294/0448

Recorded: 11/20/2000

Pages: 2

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: FUKUNAGA, TOSHIAKI

Exec Dt: 11/06/2000

WADA, MITSUGU

Exec Dt: 11/06/2000

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